

Meeting Highlights
EIIIP EMISSIONS MODELING COMMITTEE
CONFERENCE CALL
July 31, 2002

Roll Call

Greg Stella (EPA), called the roll of attending members. Members announcing attendance on the conference call included the following: Patrick Barickman, Bill Benjey, Kirit Chaudhari, Emily Harris, Billy Hodan, Mark Janssen, Serpil Kayin, Jerry Mansell, Jeff Sprague, and Greg Stella.

Background/Review

Approximately one week prior to the July 31, 2002 conference call, a memorandum was e-mailed to the committee detailing a recommendation of procedures for developing future-year spatial allocation methods for application to area source emission inventories. The memorandum gives details of the progress made in locating projection data for the Wake County, NC area and explains how the data was developed by the Capital Area Metropolitan Planning Organization (CAMPO), the North Carolina Department of Transportation (NCDOT) and local agencies. Also included in the e-mail was a plot of the percent changes in population from 1995-2025 as projected by CAMPO for the 1,344 Traffic Analysis Zones (TAZs) in Wake County. The purpose of the 7/31 conference call was to review the memorandum and discuss progress, and determine the best way to proceed with the current data and methods.

Review of Progress and Preliminary Recommendations / Reaction / Next Steps

Greg Stella and Billy Hodan opened the meeting by giving an overview of the progress that has been achieved to date over the course of the project, and especially since pursuing spatial allocation data and methods in the Wake County, NC area. The overview consisted of a synopsis of the memorandum titled: "Recommendation of Procedures for Developing Future-Year Spatial Allocation Methods for Application to Area Source Emission Inventories."

In response to the review of the memorandum it was asked whether the data could be aggregated at the census block or tract level based on the TAZ level data.

It was explained that the TAZ level data is independent of census block and tract information, therefore there is not a clean way of aggregating the TAZ data to that level. Additionally, there are differences between 1990 and 2000 census tracts which would introduce another layer of confusion if an aggregation was completed.

It was proposed that a sensitivity analysis be completed before proceeding with additional work to determine if the future spatial allocation differences would have any impact on a photochemical modeling run.

In response to the sensitivity analysis proposal, it was explained that it is expected that the future spatial allocation differences would likely be shown to have an effect on an air quality model on the small scale, and that the fact that it may not have a bearing on regional modeling is not crucial. The spatial redistribution would be used to pinpoint local air quality "hot spots".

It was proposed that PES proceed with developing the future spatial surrogates using the EPA 4 km grid, and that in a follow-on work assignment collect data for a larger portion of the State of North Carolina, which could then be used to conduct an air quality modeling run. Use of a larger area in the run would help to obtain more reliable results.

It was asked whether Vehicle Miles Traveled (VMT) data was collected as part of the current data obtained from CAMPO.

In response, it was explained that VMT data has not been obtained, but PES would request that data from CAMPO or NCDOT, recognizing that VMT data is necessary for the air quality model sensitivity analysis.

Another proposal was made to run a sensitivity analysis on the current domain to determine follow-on efforts.

In response to the proposal it was explained that the EIIP sub-committee that was initially intended to run a sensitivity analysis on the data is currently inactive, and there is not currently a mechanism in place to task the analysis work. EPA is open to suggestions for any groups that may be able to assist in running an analysis on the data.

It was affirmed that during the remainder of the current work assignment PES would continue to develop a methods paper to describe how the CAMPO methods were developed. Also, using EPA 4 km grid data, PES would develop future spatial allocation factor files for Wake County, NC for Population, Housing, and Employment surrogates. Additionally, PES would document recommendations for proceeding with this work including running an air quality model on the 4 km grid data for Wake County, model follow-up work, and collection of data outside the urban area.

It was suggested that the air quality modeling analysis consist of two separate runs: 1. Ratio the population using the current distribution and use projected emissions and controls. 2. Ratio the population to the same number as the first run, but use the projected distributions, and the same emissions and controls. Compare the two runs for differences.

Next Call

The call will be scheduled later, and the committee will be notified of the date by e-mail.